

been forthcoming as our knowledge of the health effects of exposure increases.⁴ Chronic diseases, and in particular cancer, are a major cause of morbidity and mortality in industrial nations. The control of occupational carcinogens can contribute significantly to a reduction of the future cancer burden. Although this study was not carried out to test a new hypothesis of occupational carcinogenesis, but rather to document a proven relationship in a population not previously examined, the method used can be a quick and simple approach when a occupational cause of a lethal disease is suspected.

M. WARD HINDS, MD, MPH
State of Washington
Department of Social and Health Services
Occupational Health Section
Olympia

REFERENCES

1. Bruckman L, Rubino RA, Christine B: Asbestos and mesothelioma incidence in Connecticut. *J Air Poll Control Assoc* 27: 121-126, 1977
2. Becklake MR: Asbestos related diseases of the lungs and other organs. *Am Rev Resp Dis* 114:187-227, 1976
3. Miettinen OS: Individual matching with multiple controls in the case of all-or-none responses. *Biometrics* 25:339-355, Jun 1969
4. Revised Recommended Asbestos Standard. US Department of Health, Education, and Welfare, National Institute of Occupational Safety and Health, Dec 1976.

Information Systems for Small Medical Communities

TO THE EDITOR: The letter "Concerning Libraries in Smaller Hospitals," which appeared in the December 1977 issue, was of great interest to us. While several hospitals may employ a single librarian to rotate among them, unifying a library system within these hospitals is only one solution to the problem. For those facilities that have the financial fortune to afford a librarian the problem is resolved. However, most communities neither have the financial capacity nor the personnel with credentials to undertake such a project.

In the contemporary era where the body of medical knowledge grows in great proportion each day there is a library need to be met in many medical communities without the asset of a librarian. The reference made to conference rooms or physicians' lounges with bookshelves crammed with outdated medical texts and old journals is too frequently a sad reality. Someone must maintain the library—either a permanent or rotating librarian, or, as we shall suggest below, designated personnel.

Using our family practice center of 13 generalists, 7 specialists, 2 family nurse practitioners and 1 physician's assistant as an example, we would like to give our solution of the library problem. It should be noted that our facility is a preceptor

site for the medical students and family nurse practitioners for the University of California campuses of Irvine, Davis and San Francisco, as well as for the physician's assistant program at Stanford University. As a teaching-training facility we are obliged to maintain extensive and readily accessible educational resources for ourselves and our preceptees.

We approached the library situation from three angles. Our first source of medical literature is our library (with its standard texts of anatomy, physiology, specific diseases and treatments), which is quite rudimentary. However, we extended our library beyond the medical school texts to the practical integration of diseases by purchasing a basic set of the Harper & Row's encyclopedias which cover all fields of medicine. These encyclopedias are clinically oriented and periodically updated with annual supplements, in addition to monthly international medical and surgical digests, complemented by a consulting bureau for literature needs, provided free of charge to all active subscribers. With this service outdated medical texts can be eliminated.

Second, we instituted a Master Medical Index System, which is an expansion of the Master Medical Index System designed by References and Index Services, Inc. for maintaining abstracts. This source covers every phase of medicine, subdividing into the different anatomical systems which are ultimately subdivided into specific diseases and therapeutic entities. Frequently overlooked aspects of medicine—that is, historical and social factors, new concepts and innovations, and whatever modifications one might wish to emphasize—are included.

This method is not costly to maintain, nor does it require a librarian. The index system is conveniently alphabetized and requires minimal space, as compared with a library of books and bound journals covering the same information. We are using eight 4-foot file cabinets. Each month members of the group contribute from their particular journals pertinent articles, which insures new and current material being available. As an example, a contributor may submit an article related to feeding problems of premature newborn infants. This article, representing the most recent concept in this field, would be filed in the Pediatric Section under: A. Newborn, 2. Premature newborn, b. Feeding—along with many other articles relative to the same topic. This system represents over 20 years of concepts, therapies and trends, and

makes available to physicians or students an array of articles upon which they can base research and bibliography.

Our third source of medical literature is the computerized photography libraries. The American Medical Association library has always granted requests for reprints, and now provides us with computerized searches of the medical literature through the Medline System of the National Library of Medicine. This resource is available to all AMA members and can be obtained either by letter or a telephone call. Telephone requests procure the material within five days. Our library also includes an audiovisual unit with programmed cassettes for staff and patient viewing, together with cassette programs from the Audio-Digest Foundation.

The total cost for this continuing, self-sustaining system was less than \$5,000 to implement and its yearly maintenance averages \$500.

Our system provides a broad perspective of multi-sourced information, is not expensive and offers an answer for small urban and rural medical communities to the problem of inaccessibility to a major library.

RICHARD D. FRANK, MD
Family Doctor Medical Group
Vallejo, California
MARY WIDMEYER
Physician's Assistant Student
Stanford University

BIBLIOGRAPHY

1. Reference and Index Services, Inc., 1935 N. Capitol Ave., Indianapolis 46202
2. AMA Library, 535 North Dearborn St., Chicago 60610
3. Selected List of Books & Journals for the Small Medical Library, Bulletin of the Medical Library Assn., 919 N. Michigan Ave., Chicago, IL 60611, Vol. 65, No. 2, April 1977
4. The Surgical Index, Box 1185, Palo Alto, California 94302
5. Emergency Medical Research & Education Foundation, 9841 Airport Blvd., Suite 1124, Los Angeles 90045
6. Audio-Digest Foundation, 1577 East Chevy Chase Drive, Glendale, California 91206

Informed Opinion or Assault?

TO THE EDITOR: A patient has the right to know what his doctors are planning to do to him. And his doctors have the responsibility to inform him sufficiently of the risk/benefit ratio so his consent has some meaning. Scaring hell out of the patient by dwelling on risks, however, is as evil a practice as the "I am God and don't need to tell you what I'm doing" attitude it is intended to replace.

For example, an over-zealous anesthesiologist, who describes in almost sadistic detail the risks being taken is not serving the patient through informing him; rather, he is assaulting the patient as he himself strives to escape responsibility in case an untoward result occurs. There is a world of difference between a responsible presentation of risks and an excessive detailing of them.

There is no doubt about it, we are in a risky business. It *can* hurt somebody. Yet, we should not take refuge in laying off our responsibility on the patient. If we choose to respond to legal maneuvers by acting like technicians instead of compassionate professionals, then the path to being treated like technicians won't be long or far away.

DAVID LEIGH RODGERS, MD
San Francisco

More on Health Practitioners

TO THE EDITOR: I must commend Drs. Kane and Wilson for their timely article, "The New Health Practitioner—The Past as Prologue" (West J Med 127:254-261, Sep 1977). Indeed, primary care activities are now being carried out by nonphysician personnel, such as nurse practitioners and physician's assistants, allowing the public more adequate coverage for health care delivery. However, the authors stated that "local pharmacists may be called upon to prescribe . . . as well as to dispense." This is misleading. Though many pharmacists are knowledgeable enough to prescribe, by law, they are not allowed to.¹ True, pharmacists may advise physicians about the most efficacious ways of determining dosages of medications utilizing pharmacokinetic calculations and their up-to-date knowledge of the medical literature. Pharmacists have also written out prescriptions for drugs after evaluating patients, but these had to be countersigned by a physician.²

Interestingly, it has been predicted³ that by the year 2000 the physicians' patient load will be so large that prescribing activities will have to be in the pharmacists' hands. Surely, the soda jerk druggist may still exist, but I doubt if 20 years from now *he* will still come under the classification of "pharmacist." I feel that if a pharmacist with the present doctorate degree is allowed to practice, right out of college, directly with patients, all those years of taking classes alongside medical students and all his added expertise in pharmacology will not fall by the wayside and be forgotten.

Meanwhile, today's pharmacists have shown physical assessment abilities in Indian Health Service Centers,⁴⁻⁶ and have been of great value on cardiopulmonary resuscitation teams;⁷ in drug information centers;⁸ and in hypertension,^{9,10} oncology^{11,12} and diabetes^{13,14} clinics. Just how widespread these activities will become by the year 2000, no one can say. But, I do believe that even